



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

KH

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,494	08/22/2003	Hiroaki Takano	KON-1814	9441
20311	7590	10/09/2007		
LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			EXAMINER BAKER, CHARLOTTE M	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/646,494

Applicant(s)

TAKANO ET AL.

Examiner

Charlotte M. Baker

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/21/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The disclosure is objected to because of the following informalities: remove claim numbers from the Specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. Claims 25-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer program claimed is merely a set of instructions per se. Since the computer program is merely a set of instructions not embodied on a computer readable medium to realize the computer program functionality, the claimed subject matter is non-statutory. See MPEP § 2106 IV.B.1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

Art Unit: 2625

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Takemoto (7,158,260).

Regarding claim 1: The structural elements of apparatus claim 9 perform all of the steps of method claim 1. Thus, claim 1 is rejected for the same reasons discussed in the rejection of claim 9.

Regarding claim 2: Takemoto satisfies all the elements of claim 1. The structural elements of apparatus claim 10 perform all of the steps of method claim 2. Thus, claim 2 is rejected for the same reasons discussed in the rejection of claim 10.

Regarding claim 3: Takemoto satisfies all the elements of claim 2. The structural elements of apparatus claim 11 perform all of the steps of method claim 3. Thus, claim 3 is rejected for the same reasons discussed in the rejection of claim 11.

Regarding claim 4: Takemoto satisfies all the elements of claim 1. The structural elements of apparatus claim 12 perform all of the steps of method claim 4. Thus, claim 4 is rejected for the same reasons discussed in the rejection of claim 12.

Regarding claim 5: Takemoto satisfies all the elements of claim 1. The structural elements of apparatus claim 13 perform all of the steps of method claim 5. Thus, claim 5 is rejected for the same reasons discussed in the rejection of claim 13.

Regarding claim 6: Takemoto satisfies all the elements of claim 1. The structural elements of apparatus claim 14 perform all of the steps of method claim 6. Thus, claim 6 is rejected for the same reasons discussed in the rejection of claim 14.

Regarding claim 7: Takemoto satisfies all the elements of claim 1. The structural elements of apparatus claim 15 perform all of the steps of method claim 7. Thus, claim 7 is rejected for the same reasons discussed in the rejection of claim 15.

Regarding claim 8: Takemoto satisfies all the elements of claim 7. The structural elements of apparatus claim 16 perform all of the steps of method claim 8. Thus, claim 8 is rejected for the same reasons discussed in the rejection of claim 16.

Regarding claim 9: Takemoto discloses a storage (Fig. 3, profile storage section 410) to store a plurality of model gradation characteristic information sets (input profiles) each of which represents gradation characteristics inherent to each of a plurality of image-capturing apparatus (col. 6, ln. 37-50); a retrieving section (Fig. 3) to retrieve a model gradation characteristic information set (Fig. 3, input profile folder 411-412), corresponding to an image-capturing apparatus designated by an operator (Fig. 1, computer system 100) (col. 5, ln. 32-42), from said plurality of model gradation characteristic information sets (Fig. 3, input profile folder 411-412); a gradation converting section (Fig. 3, 1st color conversion section 420 and 2nd color conversion section 450) to convert a gradation (color profile), provided for said image data (Fig. 3, image data coordinate values), to a scene-referred gradation by excluding gradation characteristics (profile according to device), being inherent to said image-capturing apparatus (col. 6, ln. 37-50), from said gradation, based on said model gradation characteristic information set (Fig. 3, input profile folder 411-412) retrieved by said retrieving section (Fig. 3); a color characteristic converting section (Fig. 3, 1st color conversion section 420 and 2nd color conversion section 450) to convert a color space (col. 6, ln. 51 through col. 7, ln. 26), provided for said image data (Fig. 3, image data coordinate values), to a scene-referred color space by excluding color

Art Unit: 2625

characteristics, being inherent to said image-capturing apparatus (col. 6, ln. 37-50), from said color space (col. 6, ln. 51 through col. 7, ln. 26); and a controlling section (Fig. 4, image processing 520) to control a concerned section included in said apparatus so as to optimize processed image data, provided with said scene-referred gradation (col. 6, ln. 37-50) and said scene-referred color space (col. 6, ln. 51 through col. 7, ln. 26), to generate outputted-referred image data (Fig. 3, output profile folder 413), which are optimized for reproducing an image on a specific outputting medium (Fig. 4, monitor or printer).

Regarding claim 10: Takemoto satisfies all the elements of claim 9. Takemoto further discloses wherein said storage (Fig. 3, profile storage section 410) also stores a plurality of model color characteristic information sets (Fig. 3, input profile folder 411-412) each of which represents color characteristics inherent to each of said plurality of image-capturing apparatus (col. 6, ln. 37-50) and said retrieving section (Fig. 3) retrieves a model color characteristic information set (Fig. 3, input profile folder 411-412), corresponding to said image-capturing apparatus (col. 6, ln. 37-50) designated by said operator (Fig. 1, computer system 100) (col. 5, ln. 32-42), from said plurality of model color characteristic information sets (Fig. 3, input profile folder 411-412) stored in said storage (Fig. 3, profile storage section 410); and wherein said color characteristic converting section (Fig. 3, 1st color conversion section 420 and 2nd color conversion section 450) converts said color space (col. 6, ln. 51 through col. 7, ln. 26), provided for said image data (Fig. 3, image data coordinate values), to said scene-referred color space by excluding said color characteristics from said color space (col. 6, ln. 51 through col. 7, ln. 26), based on said model gradation characteristic information set (Fig. 3, input profile folder 411-412) retrieved by said retrieving section (Fig. 3).

Regarding claim 11: Takemoto satisfies all the elements of claim 10. Takemoto further discloses wherein said retrieving section (Fig. 3) acquires said model color characteristic information set (Fig. 3, input profile folder 411-412) from said image data (Fig. 3, image data coordinate values).

Regarding claim 12: Takemoto satisfies all the elements of claim 9. Takemoto further discloses wherein said color characteristic converting section (Fig. 3, 1st color conversion section 420 and 2nd color conversion section 450) converts said color space to said scene-referred color space by excluding chroma differences (col. 6, ln. 51 through col. 7, ln. 49), inherently existing between various types of image-capturing apparatus (col. 6, ln. 51 through col. 7, ln. 49).

Regarding claim 13: Takemoto satisfies all the elements of claim 9. Takemoto further discloses wherein said scene-referred color space (col. 6, ln. 51 through col. 7, ln. 26) is a standardized color space established in advance (col. 6, ln. 51 through col. 7, ln. 26).

Regarding claim 14: Takemoto satisfies all the elements of claim 9. Takemoto further discloses wherein said retrieving section (Fig. 3) acquires said model gradation characteristic information set (Fig. 3, input profile folder 411-412) from said image data (Fig. 3, image data coordinate values).

Regarding claim 15: Takemoto satisfies all the elements of claim 9. Takemoto further discloses wherein said controlling section (Fig. 4, image processing 520) applies an exposure control processing and a gray-balance adjustment processing (col. 7, ln. 14-33 and col. 8, ln. 14-25) to said processed image data so as to correct a color deviation and to adjust a brightness of said image to be reproduced (col. 7, ln. 14-33 and col. 8, ln. 14-25); and then, applies a gradation

Art Unit: 2625

correction processing to said processed image data (Fig. 3, 1st color conversion section 420 and 2nd color conversion section 450), so as to adjust gradation of said image to be reproduced (Fig. 3, 1st color conversion section 420 and 2nd color conversion section 450) (col. 7, ln. 14-33 and col. 8, ln. 14-25).

Regarding claim 16: Takemoto satisfies all the elements of claim 15. Takemoto further discloses wherein said controlling section (Fig. 4, image processing 520) nonlinearly compensated for said gradation provided for said processed image data (Fig. 3, image data coordinate values) when applying said gradation correction processing (col. 6, ln. 37-50) to said processed image data (col. 7, ln. 14-33 and col. 8, ln. 14-25).

Regarding claim 17: Arguments analogous to those stated in the rejection of claim 9 are applicable.

Regarding claim 18: Takemoto satisfies all the elements of claim 17. Arguments analogous to those stated in the rejection of claim 10 are applicable.

Regarding claim 19: Takemoto satisfies all the elements of claim 18. Arguments analogous to those stated in the rejection of claim 11 are applicable.

Regarding claim 20: Takemoto satisfies all the elements of claim 17. Arguments analogous to those stated in the rejection of claim 12 are applicable.

Regarding claim 21: Takemoto satisfies all the elements of claim 17. Arguments analogous to those stated in the rejection of claim 13 are applicable.

Art Unit: 2625

Regarding claim 22: Takemoto satisfies all the elements of claim 17. Arguments analogous to those stated in the rejection of claim 14 are applicable.

Regarding claim 23: Takemoto satisfies all the elements of claim 17. Arguments analogous to those stated in the rejection of claim 15 are applicable.

Regarding claim 24: Takemoto satisfies all the elements of claim 23. Arguments analogous to those stated in the rejection of claim 16 are applicable.

Regarding claim 25: A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 9 are applicable.

Regarding claim 26: Takemoto satisfies all the elements of claim 25. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 10 are applicable.

Regarding claim 27: Takemoto satisfies all the elements of claim 26. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 11 are applicable.

Regarding claim 28: Takemoto satisfies all the elements of claim 25. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100

Art Unit: 2625

and various memories stored therein. Arguments analogous to those stated in the rejection of claim 12 are applicable.

Regarding claim 29: Takemoto satisfies all the elements of claim 25. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 13 are applicable.

Regarding claim 30: Takemoto satisfies all the elements of claim 25. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 14 are applicable.

Regarding claim 31: Takemoto satisfies all the elements of claim 25. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 15 are applicable.

Regarding claim 32: Takemoto satisfies all the elements of claim 31. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 16 are applicable.

Regarding claim 33: A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 9 are applicable.

Regarding claim 34: Takemoto satisfies all the elements of claim 33. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 10 are applicable.

Regarding claim 35: Takemoto satisfies all the elements of claim 34. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 11 are applicable.

Regarding claim 36: Takemoto satisfies all the elements of claim 33. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 12 are applicable.

Regarding claim 37: Takemoto satisfies all the elements of claim 33. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 13 are applicable.

Regarding claim 38: Takemoto satisfies all the elements of claim 33. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 14 are applicable.

Art Unit: 2625

Regarding claim 39: Takemoto satisfies all the elements of claim 33. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 15 are applicable.

Regarding claim 40: Takemoto satisfies all the elements of claim 39. A computer readable medium storing a computer program is inherently taught as evidenced by computer system 100 and various memories stored therein. Arguments analogous to those stated in the rejection of claim 16 are applicable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


CMB



KIMBERLY WILLIAMS
PRIMARY PATENT EXAMINER